

## VAGINAL HERNIA, OR VAGINAL ENTEROCELE

REMARKS BEFORE THE NEW YORK OBSTETRICAL SOCIETY, ON A CASE COMMUNICATED BY B. A. CLEMENTS, M.D., SURGEON U. S. A.

BY

FORDYCE BARKER, M.D., etc., etc.

VAGINAL Hernia of the intestines is, comparatively, of rare occurrence; but a very considerable number of cases have been reported, and the character and phenomena of the affection should be thoroughly understood by all obstetricians. The protrusion takes place at that point of the peritoneal floor of the abdominal cavity which is protected by only one layer of serous membrane, usually lateral and posterior to the uterus; but, in some few cases, it has occurred lateral and anterior to the uterus. It has, in most cases, been developed suddenly, in consequence of violent shocks from falls or strong physical efforts—while, in some few instances, it has seemed to result from difficult parturition; and, in some rare cases, it has been so slow and gradual in its development, that the time of its commencement has been unknown. The intestine which most frequently protrudes is the ileum; but in some cases, the colon and the cæcum have been involved.

In one case, in which M. Levret had the opportunity of making an examination after death of the body of a woman who had enterocele in the left side of the vagina, he supposed the hernia to be congenital, or at least, that it had existed from early life, for the acetabular portion of the ileum was much inferior in point of relative position on the side of the hernia than on the other. In this case, the sigmoid flexure of the colon was the part of the intestine which protruded.

The first recorded case was published in the Memoirs of the Royal Academy of Surgery, in the early part of the 18th century, by Garengéot. It occurred in a woman about a month after her fifth confinement, as a result of a strong effort in lifting a heavy weight. After a careful examination, Mons. de Garengéot became satisfied that it was a hernia, and succeeded in reducing it by taxis. But in order to convince himself that it was a hernia of a kind of which he had never heard or read of, he desired the patient to get up and walk, and cough strongly: The hernial tumor was again formed, which he succeeded in reducing a second time. He kept the patient in bed until he contrived a pessary which the patient could wear, and she never afterwards suffered any inconvenience from the hernia.

Hain reports one case which occurred in a young unmarried lady, in consequence of violent and repeated efforts to evacuate the bowels, when suffering from obstinate constipation.

Sir Astley Cooper, in his great work on Hernia, mentions several cases. He expresses the belief that the reason of its being comparatively rare is, that the oblique position of the pelvis is unfavorable to its production. In the erect, as well as in the sitting posture, the intestines fall rather upon the symphysis pubis than on the posterior part of the pelvis; and when thus gravitating into the anterior part of the pelvis, they push the uterus against the rectum, and close the space which would be otherwise existing between them; for he says: "Upon passing my fingers in the dead body from behind the uterus in the cavity of the pelvis, in women who have died a few weeks after delivery, I have found that I could thrust the reflection of the peritoneum between the uterus and rectum, readily down to the perinæum."

The symptoms which usually attend vaginal hernia, when

suddenly developed, are acute pain, with a sense of fulness in the vagina, in some cases the pain rapidly extending over the whole abdomen, nausea and vomiting, painful and difficult micturition, and, when occurring in the later period of pregnancy, threatened premature labor, and in some cases hemorrhage. When the tumor is developed during parturition, the pains are most atrocious, but are different from the ordinary labor pains, and they arrest the progress of the labor. A soft, yielding tumor is found in the lateral portion of the vagina, generally posterior, but sometimes anterior, to the uterus, which, on pressure, may give a slight gurgling. The pulse usually becomes very quick, there is hurried respiration, pallor, and other symptoms of shock.

When existing before, or developed during labor, it constitutes a very serious complication; but I can find no instance recorded where it has led to a fatal result, either to mother or child—perhaps for the reason that the recorded cases were in the hands of competent and intelligent men who recognized the true cause of the difficulty and removed it by appropriate measures.

Sinellie mentions three cases in which this complication with labor existed. In the first case, he gives the details, briefly, of two labors. In the first labor, the hernia could not be reduced, and inflammation and strangulation of the intestine followed. She had a large discharge of blood after the labor, but by fomentation and warm emollient cataplasms, the stricture was overcome and the hernia reduced. On the occasion of her next labor, the intestine was forced down again. The progress of this labor was rapid; Dr. Smellie introduced his hand into the vagina before the head had descended into the cavity of the pelvis, and pushed it up above the sacrum, and thus was enabled to reduce the hernial protrusion. The membranes were ruptured by this operation, the head was forced rapidly down into the pelvis, and delivery was speedily accomplished. In another case, communicated to him by Mr. Stubbs, of Bedfordshire, delivery was accomplished by a similar method of procedure. In the third case, the first appearance of the hernial tumor occurred nine months before pregnancy, but the patient was accustomed to reduce it herself. But about five weeks before the full period of gestation the tumor had

acquired such a volume that she was not able to reduce it all, and for some days she suffered great pain. While Dr. Smellie was examining the tumor, it ruptured, and there was a small discharge of blood and pus, and a full half pint of thin, greyish fluid, when the patient exclaimed that the intestine was gone up, and that she was now free from pain, which before had been so violent. The patient went to her full term, and was delivered by one of the pupils of Dr. Smellie. Some months after her confinement, she was examined by Dr. Smellie, who found that the tumor had kept up. The ruptured part of it presented an appearance of firmness. Five months after, he says, the rupture, unfortunately, reappeared, in consequence of the patient overstraining herself, and she soon afterwards again became pregnant. But the tumor was reduced by one of Dr. Smellie's pupils, and she was again safely delivered at the full term of pregnancy.

M. Hain, in his essay on hernia, relates a case in which entero-vaginal hernia resulted from a fall, which, on the following day, was followed by considerable hemorrhage; and subsequently the husband had occasionally recognized a small tumor in the vagina. Her fourth pregnancy occurred soon after, and in the later months of gestation she frequently experienced pains in the region of the uterus, which caused her great anxiety, as they were quite different from any that she had had in former pregnancies.

When labor came on, it progressed as usual, until the head engaged in the pelvic cavity, when the parturient pain was suddenly arrested by another of great violence. During this pain the head seemed to recede, instead of advancing. On examination, M. Hain found a tumor about the size of a walnut, on the upper and right portion of the vagina, which was exceedingly tender to the touch, and which imparted to the finger a sensation precisely the same as he before had experienced on applying his finger to cases of inguinal and crural hernia. Labor was finally completed without a reduction of the tumor, but this was easily accomplished after the delivery was over. Twenty-four hours after, the hernial tumor was again formed and again reduced. On the next day the pains returned with great violence. The lochiaæ were suppressed, a fever of considerable severity supervened, the abdomen became

distended and exceedingly tender to the touch. As he says, a tempest of phlogistic symptoms followed, raging for several days. It is evident, from the description, that the patient had a sharp attack of peritonitis. In two subsequent labors there was a recurrence of similar attack. One labor was terminated by the use of the forceps. This patient eventually recovered, and the hernia seems to have been radically cured.

All the cases reported seem to have eventually been cured by plastic exudation, which sealed up the aperture through which the intestine protruded.

I can find but one fatal case on record, and this is reported by Gunz. A surgeon, it is believed, supposed the hernial tumor to be an abscess, and plunged his bistoury into it. The incision was followed by a protrusion of the cœcum, and a great part of the colon, which were strongly propelled through the incised aperture by the involuntary efforts of the patient.

The protruded bowels were not attempted to be reduced. Gangrene supervened, and the poor woman died.

Vaginal hernia, or vaginal enterocèle, as it is now termed, must be rare, as but a small number of cases have been reported. In the sixteen volumes of Transactions of the Obstetrical Society of London, there is not a single case reported. Yet from the fact that I have met with three cases, I am inclined to believe that it may have sometimes occurred when its true character was not suspected.

CASE I.—My first case was in a lady in labor in her first confinement. I saw her in the early stage of the labor, when she gave no history which caused apprehension; and on a careful vaginal examination, I discovered nothing abnormal. On visiting her four hours subsequently, I found that everything was going on well until some twenty minutes before my arrival, when the pains became very severe, and the character of the pains was quite different from ordinary bearing-down pains. Her appearance also alarmed me, as her countenance had a bad expression, her skin was hot, her pulse was very rapid, 124, if I remember rightly, and each pain was attended with most distressing vomiting. On vaginal examination, I found the os well dilated, the head had descended into the pelvic cavity; but on the right side of the vagina I discovered a soft, yielding tumor, excessively sensitive to the touch, which

was increased in a marked degree as to size by the pains, which seemed to have no effect on the foetal head. At first I was greatly puzzled as to the nature of the tumor; but, after a few moments, I recalled to mind a case published by the late Professor Meigs, in his translation of Colombat de l'Isère on Diseases of Women, and I was soon convinced that I had a case of vaginal enterocele. I placed the patient profoundly under the influence of chloroform; and then, after pushing the head above the sacrum, I easily reduced the tumor, but kept up for some minutes pressure with my hand. This, after a little time, seemed to excite uterine contractions, the head soon forced my hand out; and, in less than a half hour, delivery was completed. The convalescence was rapid, and her recovery was complete.

CASE II.—The second case was that of a lady in the seven and a half month of her fifth pregnancy. She had taken a cottage for the summer at Orange, N. J. In stepping off the platform at the railway station, she suffered a severe shock from a partial fall, which she averted by a strong effort. She was at once seized with a violent pain in the vagina, and felt something protrude from the vulva. With difficulty she was carried into a house near the station. I saw her between five and six in the afternoon, about seven hours after the accident occurred. She then had severe peritonitis, with all the characteristic symptoms, which it is unnecessary for me here to detail. On account of the excessive tenderness of the parts, it was impossible to make a vaginal examination until she was brought fully under the influence of chloroform, when I found a soft tumor protruding from the vulva, and I was not long in determining the existence of a vaginal hernia fully as large as my fist. This was easily reduced, and fifteen drops of Magendie's solution was used hypodermically. I introduced into the vagina a lint pessary, saturated with tannin (Aqua  $\frac{3}{4}$  ij, Tannic Acid  $\frac{3}{4}$  i.). Ten drops of Magendie's solution of morphia were used hypodermically every two hours during the night. I omitted to state that while she was under the influence of the chloroform I introduced a catheter, and drew off twenty ounces of water. On the following day, I took out a competent nurse, and taught her how to introduce the lint and tannin pessaries, the use of which was continued up to the

time of her confinement. Eleven days after the accident she was brought back to this city. Five weeks and three days after the accident she was confined, after six and half hours of perfectly normal labor, and without any appearance of the vaginal tumor. Her recovery was rapid and complete.

CASE III.—The third case I saw in consultation with two other medical men. The patient had borne seven children. All her labors had been tedious, over twenty-four hours, and were followed by rather severe hemorrhage and a protracted convalescence. When I saw her, she had been in her eighth labor twenty-eight hours, and she was in a state of violent hysterical mania, while her attendants, her husband, nurse and her sister, and the two physicians, were all completely demoralised. The first eighteen hours of the labor had gone on as in previous parturitions, when suddenly she began to shriek with pain, as she never had done in former labors. She was wholly uncontrollable, and would permit no one to touch or assist her. An eminent obstetrician had been called in consultation, but he left disgusted, as he could get no examination, and the patient refused chloroform. I however succeeded in getting her to inhale it. On first making an examination, I thought her symptoms were due to an over-distended bladder, as I could not find that any water had passed for nearly twenty hours. After drawing off a very large quantity by the catheter, I made a more careful examination, when I found the head beginning to descend in the pelvic cavity, the cervix well dilated, and in addition very distinct evidence of a vaginal enterocèle of considerable size. I succeeded in reducing it with some difficulty. After waiting an hour for uterine action, which was entirely absent, as the patient was very much exhausted, I applied the forceps and delivered her. She was very ill from peritonitis for nearly a week, during which time I saw her daily, but she eventually made a good recovery.

CASE IV.—The following case has been communicated to me by B. A. Clements, M.D., Surgeon U. S. A.

The history of this case is condensed from notes taken at the bedside, and is given as nearly as possible in the words then used.

"Mrs. ——, age 32 years, above average height and of naturally vigorous constitution, was married at 21 years of

age. Had two children—the first a year after marriage—the second two years ago. Has never had a miscarriage or abortion, nor a leucorrhœal discharge of any kind. About a year after the birth of her first child, she was supposed to be suffering from retroversion of the uterus, and wore a pessary with relief for some eight months. Between this time and the birth of her second child, a period of about seven years, she was in poor health, mainly from severe hemorrhoids, for which she underwent an operation in the winter of 1871 that resulted in a complete cure. Her health then greatly improved, and before the birth of her second child in December, 1872, she had greatly increased in weight and strength. After the birth of this child she continued to enjoy much better health than for many years previous, though she suffered habitually from constipation.

"On July 16, 1874, being then in the seventh month of pregnancy with her third child, she made a mis-step from a street crossing; and after several ineffectual but violent efforts to recover her footing, fell forward upon her hands and knees, without however striking her abdomen. She was not pained by the fall, and was able to regain her carriage and rode to her home, three miles distant, complaining only of feeling much "jarred." Soon after reaching her home, she felt an unusual inclination to stool, and on going to the water-closet she discovered a protrusion from the vulva which she herself replaced. On examination very soon afterwards, a somewhat pear-shaped mass was discovered in the vagina, and on ocular inspection it was found to protrude to the margin of the vulva, and was of a pale pink color. It was neither entirely soft nor solid, and was evidently intestine covered by vaginal mucous membrane. It was readily reduced with the fingers without pain being caused. There was no discharge of blood, and neither at this nor at any other or subsequent time was there any indication of a rent in the vagina. During this night she had many symptoms of impending miscarriage, but they passed off within twenty-four hours. She was kept in bed for five weeks; but descent of the tumor invariably occurred when she went to stool.

"No change of importance occurred; she went to the end of her term, and was confined after a brief labor, without any difficulty referable to the hernia, on September 12th, 1874.

"For a few days prior to her confinement her urine was albuminous, and her face swollen, and thirty-six hours after delivery, after complaining of intolerable headache, she was seized with violent convulsions, of which she had five in seven and one-quarter hours. It is unnecessary to remark on this complication, further than to say that she was treated by free bleeding (after the third convolution), chloroform, and morphia, and recovered rapidly.

"September 21, nine days after delivery, she felt exceedingly well, and being in the best spirits she rose from bed, and while on the chamber vessel, at 9 A.M., she was suddenly seized with violent pain in the uterine region. Attention is particularly invited to the accounts to be given of these attacks. The pain rapidly increased in severity—she had shivering, cold extremities, nausea, faintness, and severe headache. The pain soon became intolerable, and at 9.20 A.M. it was necessary to administer chloroform by inhalation; half a grain of morphia was also injected hypodermically. By 1 A.M. her pulse had risen to 120. At 11.10 A.M. I placed her in the 'knee-chest position,' and dilating the vagina completely, she in a few minutes thereafter expressed very great relief. Her abdomen became distended and sensitive to pressure, and the pain continued, but not with such severity, and by 4.30 P.M. her pulse was 124. At this time she was seen by Dr. S. G. Moses, of St. Louis, who, on making a digital examination, at once discovered the protrusion in the vagina—the tumor being about the size and shape of a distended thumb of a glove; it was not dense nor quite soft, and extended to about on a line with the os uteri. It was readily reduced, and a soft small sponge inserted as a pessary. By 8.30 P.M. all her symptoms were considerably alleviated. The following day she was better, her bowels moved at 11 A.M., and by the afternoon her pulse had fallen to 100, but her abdomen was still tender and distended. On the 23d in the evening her pulse was 76, but she still complained of her abdomen; much flatus was passed early in the morning of the 24th, which gave her great relief, and at 10.30 A.M. she had a free movement from the bowels, which afforded immediate and great relief to the distended and tender abdomen. The soreness of the abdomen did not entirely disappear until the 25th, four days after the beginning of the attack.

"September 27.—A digital examination revealed the presence of the tumor in the vagina; it was compressible and easily reduced, and when reduced there was left a small mass of soft folds of the mucous membrane. The position of the spot at which the protrusion occurred was at the bottom of Douglas' cul-de-sac and a little to the patient's right side.

"September 29th.—On this day the hernia was found soft, small, and easily reduced, but pressure at the bottom of the cul-de-sac gave pain. Whilst the tumor was still down, in order to determine more precisely whether it was composed of the small intestine or of the rectum, I carefully injected into the rectum three measured quarts of tepid water, and then again examining the tumor it was found to have been in no manner affected. Hence it was concluded to be the small intestine—and that opinion is still confidently entertained up to this time, February 7th, 1876.

"*Second Attack*, October 16, 1874.—At 8 A.M., whilst stooping down, she was again seized with sudden violent pain in the uterine region—it was attended with shivering, cold extremities, and nausea, and the abdomen became rapidly distended and sensitive. Morphia was freely given, she was placed in the knee-chest position, which gave some relief, and the pain subsided in the course of the afternoon. The next day the tumor and the part at which it protruded were very sensitive, so much so that I did not then attempt to reduce it, though it seemed easily reducible. An operation from the bowels gave great relief. The sensitiveness of the tumor did not disappear until the 18th, when she was again comparatively well.

"She was able to ride out daily from the 25th to the 30th of October, but it was found that the exercise caused the hernia to increase in size. October 31st, her menses appeared. Irrigations of two gallons warm water were daily used, and it was found necessary to use daily some form of purgative. Her general health seemed fair, and she again rode out on November 21st.

"*Third Attack*, November 22d, 1874.—She rose in the morning, feeling particularly well; but whilst at breakfast she felt pain in the pelvic region, which rapidly increased, and in half an hour was very severe. The sponge pessary had been applied just before she rose from bed; and there was then no pain

or tenderness whatever in the parts. She was at once placed on her knees and chest, but the pain was so severe she could not long maintain this position. Enemas were given without effect. She was then induced to resume the 'knee-chest position,' the vagina was completely distended, and the tumor disappeared *without manipulation*. Being induced to maintain this position for some twenty minutes, she soon felt great relief from pain, so that by 10 A.M. she had no pain at all. At this time, digital examination revealed great tenderness in the parts concerned. (It will be remembered that there was no tenderness whatever in the early morning, when the sponge was inserted.) The abdomen had become distended, and the hypogastrium was very sensitive. There was no return of the pain, but the tenderness of the tumor continued until the 25th (three days). During these three days, also, the sponge, when removed, was always found tinged with blood, which was believed to proceed from the uterus.

" November 30th, 1874.—The border of the hernial opening could now be well defined for the first time—it being circular, thicker, and more indurated. The tumor when prolapsed, seemed smaller, and at times was scarcely perceptible. She rode out occasionally and seemed to be doing well until the

"Fourth Attack," December 9, 1874.—On rising from breakfast she began to have severe and peculiar pain as in previous attacks. The night before she had complained of uncomfortable distention, and also on rising from bed this day. An examination showed but slight descent of the hernia, and entire absence of pain or tenderness in it. She was at once put on her chest and knees, and the vagina distended by air; but this measure did not afford any relief. Enemas were given without avail, and irrigation of the vagina with hot water was also practised. Her abdomen began to swell in half an hour after the pain began, and she had nausea, cold extremities, and shivering. Morphia was freely given, and, her bowels having meantime moved, the pain at 1 P.M. ceased. 3 P.M. pulse was 94 and she felt sore in the hypogastrium. She speedily recovered from the attack, there being less abdominal tenderness than usual.

" From this time to the latter part of January, 1875, she was able to ride out at times, but her general health seemed to retro-

grade. She continued to nurse her infant, but had barely sufficient milk. At times, on replacing the sponge, the uterus would be found quite sensitive. The hernia seemed to descend in proportion to the amount of exercise practised, but she had become wearied of confinement and somewhat despondent, so that I deemed it advisable not to confine her to the house.

"January 31st, 1875.—On examination, the margins of the hernial opening are very distinct—feeling like the rubber rings used for children teething—only of about half the calibre, and of about one and a fourth inches in diameter; there is one tender point on the outer side of this ring, and the vagina is somewhat more relaxed at this point than usual.

"February 1st.—The following is noted under this date. From time to time, during the last three weeks, it has been observed that, when the sponge pessary happened to be omitted, there seemed to be no more descent of the hernia than when it was used—provided she remained quiet. I have therefore concluded to discontinue its use for a time, and as soon as the existing inflammation subsides will use astringent irrigations." Its use was now finally abandoned.

"February 6th.—On examination, the condition of the parts concerned in the hernia is most noticeable. There is a complete well-marked ring about one and a half inches in diameter, at the bottom and right side of the cul-de-sac, feeling callous to the touch; the mucous membrane covering this ring is much more dense than before, and there is scarcely a perceptible descent of the hernia, the vagina only being somewhat prolapsed, the space within the ring being thicker and more dense, the whole giving, it would seem, unmistakable indication that there had been a consolidation and induration of the parts!

"February 8th.—An examination, confirmed that of the 6th just noted. It seems evident that there has been some inflammation with plastic exudation in the parts concerned in the hernia, and most likely this began about January 25th, when the endometritis was established.

"*Fifth Attack*, February 9th, 1875.—At 8 A.M. of this day, whilst at breakfast, the well-known and peculiar pelvic pain again began, and rapidly increased in severity. Examined at one, there was found to be some descent of the vaginal mucous membrane, but none of the hernia. She was placed in the

knee-chest position, but without relief; tepid enemas were also given, but they returned unchanged. Morphia was given. At 9.30 the pain was extreme ; there was nausea, the abdomen became distended, and the extremities were cold. By 10.20 she had taken one grain of morphia and began to feel easier, and by noon she was nearly free from pain ; but it recurred at 1.20 P.M., and caused excessive nausea and feeble pulse. By 3 P.M. she was wholly free from pain, but the abdomen was swollen, and tender on pressure, and the last named condition did not disappear until February 11th, two days after the attack. The night previous to this attack she had a free operation from the bowels, with discharge of much flatus.

"February 19.—An examination, elicited no sign of tenderness in the uterus or elsewhere, and the uterus was normally moveable in all directions. She expressed herself as feeling 'perfectly well.' She was able to ride out by February 26th, and she went out evenings and took frequent rides with much improvement in strength and spirits. The use of a slightly astringent vaginal irrigation was persisted in. An examination on February 26th showed the edges of the "ring" less marked, and there was no sensitiveness of the uterus or adjacent parts. March 11th the menses reappeared, of normal character.

"She stated that on March 15, and again on the 19th, she had a slight paroxysm of the peculiar pelvic pain, which each time came on whilst dressing in the morning, and lasted ten to fifteen minutes, but she made no mention of it at the time.

"She now improved very much in her general health, had a more abundant supply of milk for her infant, and felt quite well until the last week in April, when she complained of uneasiness in her uterus and had frequent headaches.

"*Sixth Attack.*—On May 1st she was feeling very well, but whilst at breakfast she felt a return of the pain, which by 9 A.M. became very severe. The abdomen became very speedily distended and sore, but this time she did not have nausea or cold extremities. A digital examination showed a general relaxation of the vagina, and the uterus was lower than usual, and pain was produced on lifting it with the finger. There was no hernia, and the margins of the 'ring' were not so well defined as they were on February 6th and 8th. Morphia was given, and she was placed in the knee-chest position, which she

at once said gave her much relief; but some pain continued until noon, and the tenderness of the abdomen continued until the night of the next day.

"Mrs. —'s health now improved very rapidly, and early in this month (May, '75) she made a journey to the East, and underwent much fatigue in visiting, etc., without any ill results. She continued to gain flesh and strength, and in September weaned her infant, and thought that she had never been in better health in her life—and her weight had increased in October to 158 pounds.

"*Seventh Attack*, after an interval of nearly six months. October 23d, '75.—She had during the day a bad headache, without ascertainable cause, and at night whilst preparing to retire she was suddenly seized with the usual "peculiar" pelvic pain. Her abdomen speedily became distended, tympanitic, and tender, but the symptoms were not as severe as usual. Morphia was freely given, and the pain subsided in the course of the night. A digital examination showed that there was no hernial protrusion, and the 'ring' of hard tissue was as last noted in May of this year (1875). The uterus was sensitive to pressure, on lifting it with the finger. Enemas and vaginal irrigations with warm water had no evident good effect. The abdominal tenderness continued all the next day, but she was well again on the 25th October, 1875.

"She remained quite well, but continued to be annoyed by habitual constipation, which required the use of aloetic pills. She also menstruated with regularity.

"February 7th, 1876.—She had a slight attack of what she regarded as the usual pain at 11 A.M., but it subsided in about twenty minutes without treatment.

"*Eighth Attack*. February 10th, 1876.—Having complained of a feeling of abdominal distention, she had suddenly a return of the pain similar to all the preceding attacks. The abdomen very speedily became tympanitic and tender to the touch, and as the pain increased she had nausea and cold extremities. She was placed in Sims' position without relief, and enemas of warm water were ineffectually used. Morphia was also given freely, and she became easier in the course of the night, but she was not free from abdominal tenderness until the 12th. A vaginal examination showed that there was no descent of intestine and

that the 'ring' and adjacent parts were in the condition last noted.

"February 15th, 1876.—A digital examination made whilst she was in the usual obstetric position (*not* in the 'knee-chest' position) showed the existence of the indurated 'ring' as last described—the included surface of this ring was firm but not wholly unyielding—and there was absolutely no descent of the intestine, nor was there any tenderness anywhere in the uterus or adjacent parts. The patient's general health at this date is excellent."

"It is desired to have an opinion on the following points especially :

"1. The mechanism of (or, perhaps, more correctly, the pathological anatomy of the parts concerned in) the hernia—especially of the indurated 'ring.'

"2. The cause and nature of the attacks of sudden and acute pain.

"3. The probable effect of a future pregnancy on the condition of the parts.

"4. What means of prevention, relief, or cure can be adopted?"

Now, in relation to this very interesting case, I will first remark that the vaginal hernia, which occurred in the seventh month of pregnancy, does not seem to have interfered at all with the process of parturition, nor was the development of the hernia attended with any symptoms of peritonitis, the first attack of which occurred nine days after delivery, when she rose from her bed to evacuate the bladder. Seven hours after this, a soft tumor, of the size and the shape of the thumb of a glove, was discovered in the vagina, which was readily reduced, after which the symptoms of peritonitis were greatly alleviated. Two days after the attack a free movement of the bowels was followed by great relief to the tender and distended abdomen.

Twenty-five days after the first attack, she had a second, much less severe, which was relieved by placing the patient in the knee-chest position, and the free use of morphia. In five weeks after she had a third attack, which apparently came on without any exciting cause from physical effort on her part.

severe one, a fortnight later, and two months after this a fifth. There was then an interval of nearly three months before she had a sixth attack. During all this time she had been wearing a sponge pessary, daily introduced, and astringent injections were also used. There was no hernial protrusion with the sixth attack, but yet the patient was relieved by placing her in the knee-chest position. It was nearly six months before she had a seventh attack, and four months after an eighth, but the two last were less severe than the former ones.

Now, on a review of this very interesting case, we find that seven out of eight attacks came on soon after rising in the morning, without premonition, and, in fifteen minutes, developed symptoms of acute peritonitis, viz., intense pain, abdominal tenderness, and tympanites, with a very rapid pulse. In the earlier attacks there existed a vaginal tumor, which an hour previous to the attack was not sensitive to pressure when the sponge pessary was introduced; but this hernial tumor immediately became very painful on pressure.

The severe pain of the attacks were overcome by the prompt, wise, and judicious treatment of the attending physician in a few hours, and the abdominal tenderness and tympanites disappeared in two or three days.

I think the cause of these attacks can only be explained on the theory of suddenly developed constriction or strangulation of some portion of the intestine, a condition now well understood by pathologists. It is a curious fact, which I believe is well authenticated, that in some fatal cases of this kind the constriction is not complete, but is found to admit the passage of a finger, or even a larger body; but it is sufficient to excite *spasmodic* contraction, which renders the intestine impervious. This seems to have been overcome by keeping her in the knee-chest position for twenty minutes. She had a fourth attack, a